Windows Server Failover Cluster Supported Configuration List

1. Configuration List

This is the configuration list of Express5800 series and iStorage series which NEC has validated for Windows Server Failover Cluster operation.

NEC provides information about validated configurations so customers can choose appropriate an configuration for their requirements.

2. Terminology

HBA
Stands for Host Bus Adapter. It is an interface controller to connect servers and storage devices.

FC HBA
Stands for Fiber Channel Host Bus Adapter. It is a HBA to connect fiber channel devices.

SPS
Stands for StoragePathSavior. StoragePathSavior is the software product to provide bus redundancy for NEC iStorage

3. To Choose Configuration

* HBA
HBA for connection with shared storage may vary depending on the type of on servers.
Please contact NEC to determine compatibility.

* Bus Redundancy Software
Software type and version for bus redundancy may vary depends on storage types.
Please contact NEC to determine compatibility.

* Number of Nodes
Supports up to 16 nodes which Windows Server Failver Cluster supports

* Heterogeneous Environment in Clustering
It is possible to build a cluster with heterogeneous servers/storage which are listed here.
As for HBA, it is possible to have heterogeneous HBA in a cluster as long as they are compatible with servers.
It is necessary to select a server which has sufficient resources to support multiple line-of-business applications.
When adding a node into an existing cluster, the model must be equivalent or newer with equivalent or more of processor and memory to the existing node
To use Live Migration feature in Hyper-V, it is recommended to build a cluster with servers with same processor version.
There are limitations to use different versions. Pleae see the link below for details.
Hyper-V VM Processor Compatibility In Brief

* Hyper-V Live Migration Feature
Hyper-V Live Migration feature is available on clustered systems which use models supported by Hyper-V 2.0
(Need clustering on Host OS in order to use Hyper-V 2.0 Live Migration feature.)
Please contact NEC to determine compatibility.

* Clustering Among Guest OS
Windows Server Failover Cluster requires shared storage.
For Hyper-V VM, the only available shared storage is iSCSI connected storage.

Windows Server Failover Cluster Supported Configuration List

WSFC Supported Servers — As of Oct 2011

	Windows Server 2008 R2 *1	Windows Server 2008(x86) *2	Windows Server 2008(x64) *2
B120a	x	x	x
B120b	x		
B120b-Lw	x		
B120a-d	x	x	x
B120b-d	x		
B120b-h	x		
120Rh-1		x	x
R120a-1	x	x	x
R120b-1	x	x	x
120Rj-2		x	x
R120a-2	x	x	x
R120b-2	x	x	x
140Rf-4		x	x
R140a-4		x	x
R140b-4	x		
E120a			x
E120b-M	x		
E120b-1	x	x	x
A1040			x
A1160			x
A1040a	x *3		x
A1080a-S	x *3		x
A1080a-D	x *3		x
A1080a-E	x *3		x
R320a-E4	x *4		
R320b-M4	x *4		

WSFC Supported iStorage (Fibre Channel) — As of Oct 2011

	Windows Server 2008 R2 *1	Windows Server 2008(x86) *2	Windows Server 2008(x64) *2
M10e	x	x	x
M100	x	x	x
M300	x	x	x
E1-10	x	x	x
D1-10	x	x	x
D1-30	x	x	x
D3-10	x	x	x
D3-30	x	x	x
D8-10	x	x	x
D8-20	x	x	x
D8-30	x	x	x
S4900	x		x

WSFC Supported iStorage (iSCSI) — As of Oct 2011

	Windows Server 2008 R2 *1	Windows Server 2008(x86) *2	Windows Server 2008(x64) *2
NS500Ba	x		
NS300Ra	x		
NS500Ra	x		
M10e	x	x	x
M100	x	x	x
M300	x	x	x
E1-10	x	x	x
D1-30i	x	x	x
D3-10i	x	x	x
D3-30i	x	x	x
D3-30(iSCSI)	x	x	x

Note: Build an iSCSI environment with 1Gbps or greater when using iSCSI storage as shared storage for a cluster.
Operating iSCSI with 100Mbps or 10Mbps may degrade the performance and cause problems on monitoring cluster resources.

*1 : w/o SP, support SP1 environment
*2 : w/o SP, support SP2 environment
*3 : Please see "System Configuration Guide" for supported OS by CPU type
Currently not available for iStorage M10e/M100 (iSCSI). Will support after FY11 Q3.
*4 : Support no-SP envieonment.